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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,457	07/14/2003	Rajan A. Jaisinghani	P56907	3861

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EXAMINER

CHIESA, RICHARD L

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,457

Applicant(s)

JAISINGHANI, RAJAN A.

Examiner

Richard L. Chiesa

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 36-87 and 94-141 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-24, 36-41, 64-77, 94-101, 103-105, 107-111, 114, 115, and 124 is/are allowed.
6) ☒ Claim(s) 42-63, 78-87, 102, 106, 112, 113, 116-123 and 125-141 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the filter species A (Figures 1a-c) and electrode species a (Figure 11A) in the reply filed on March 10, 2005 is acknowledged. The traversal is on the grounds that it is not proper to impose an election of species requirement based on differing filter and electrode patterns. This is not found persuasive because there are numerous significant differences between the various filters and electrodes. For example, Figures 6-9 illustrate both pleated and unpleated filter mediums. Furthermore, Figures 11A-11D show electrodes with honeycomb, rectangular, and circular structures.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claim 106 is objected to because the word "correspond" on line 10 should apparently be changed to --corresponding--. Appropriate correction is required.

Claim Rejections - 35 USC §103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1724

4. Claims 42-63, 78-87, 102, 106, 112, 113, 116-123, and 125-141 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,999,964 to Carr in view of U.S. Patent No. 6,497,754 to Joannou. Carr (note Figures 1-5, and col. 3, line 27 to col. 4, line 41) discloses an electrically enhanced filter apparatus and process with a porous replaceable filter medium 30 positioned between perforated grids 26, 28 forming pockets between arms of the filter assembly substantially as claimed. It would appear that Carr may not explicitly state that the grids are conducting. Furthermore, Carr may not expressly disclose the presence of conductive print or insulated spacers. However, Joannou (note Figures 1-6) teaches the well-known use of conductive grids 5, 10, including conductive graphite printing (note col. 4, lines 5-17), positioned on both sides of a filter medium 1 with an insulated spacer 12 (note col. 4, lines 53-65) to properly position the grids in an electrically enhanced filter apparatus and process for the purpose of ensuring maximum electric charging and particle collection (note Abstract and col. 2, lines 20-64). Consequently, it would have been readily obvious to one of ordinary skill in the art to employ conductive grids, conductive graphite printing, and insulator spacers in the Carr electrically enhanced filter device and method in order to increase electric charging and particle capture as taught by Joannou.

Allowable Subject Matter

5. Claims 1-24, 36-41, 64-77, 94-101, 103-105, 107-111, 114, 115, and 124 are allowed.

Art Unit: 1724

6. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references have been cited as art of interest to show other electrically enhanced filter systems.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-0987.

Facsimile correspondence must be transmitted through (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Chiesa
May 12, 2005

Richard L. Chiesa

**RICHARD L. CHIESA
PRIMARY EXAMINER
ART UNIT 1724**

May 12, 2005